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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/770,765	01/25/2001	Meir Feder	14531.107.1.4	7763

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EXAMINER

TRAN, HAI V

ART UNIT PAPER NUMBER

2611

DATE MAILED: 11/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/770,765

Applicant(s)

FEDER ET AL.

Examiner

Hai Tran

Art Unit

2611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 31 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-60 is/are pending in the application.
- 4a) Of the above claim(s) 1-29, 36, 40-42 and 46 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 30-35, 37-39, 43-45 and 47-60 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>04/05, 08&amp;09/05</u> .   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 08/31/2005 has been entered.

### ***Response to Arguments***

Applicant's arguments with respect to amended claims 30-35, 37-39, 43-45, 47-58 and newly added claims 59-60 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 58 recites the limitation "wherein the client identifier" in lines 1-2. There is insufficient antecedent basis for this limitation in the claim.

Applicant is advised to carefully review claim 58 for compliance with 35USC§112, 2<sup>nd</sup> Paragraph.

The following art rejection is applied to applicant claims as best understood in view of the 112 2<sup>nd</sup> paragraph rejection above.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 30-35, 37-39, 43-45, and 47-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Adams (US 6044396) in view of Day et al. (US5996015).

Regarding Claim 30, Adams shows a system that receives data from the plurality of sources and a method of bandwidth allocation for transmitting video on a cable network comprising identifying compression parameters to be used to compress the data that is received from the sources to a desired depth of compression (col. 5 lines 10-50, encoding rate determined by the bandwidth availability), associating the compression parameters with a set of values and threshold ranges (col. 5 lines 15-50, col. 6 lines 15-50, using parameters of B buffer fullness, T buffer threshold, and Cm maximum rate to determine proper encoding rate), receiving data from a plurality of data sources a plurality of data sources (col. 2 lines 27-41, col. 4 lines 35-50), differentially converting the data sources into compressed video streams responsive to an instantaneous resource restriction (col.

5 lines 10-50, col. 7 lines 30-45), and multiplexing the compressed video streams on a single transmission line (col. 4 lines 35-50, see fig. 1 item 1 10, fig. 2).

Adams fails to show differentially converting the data to a desired depth of compression and for degrading image based on a function of the types of data to be displayed and a function of client capabilities.

Day discloses differentially converting the data to a desired depth of compression and for degrading image based on a function of the types of data to be displayed and a function of client capabilities (Col. 5, lines 65-Col. 6, lines 25). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Adams to encode/compress data according to client device capability, as taught by Day, so to ensure that all of the multimedia segments have common operating characteristics thereby accommodating with the bit rate/transfer rate of the communication link and the "play rate" and resolution of the display device and moreover avoiding any possibly data loss and any undesirable effects during the video or audio or other multimedia presentation.

Regarding Claim 31, Adams in view of Day further shows converting each stream into a different frame rate (Day; Col. 4, lines 10-17).

Regarding Claim 32, Adams shows that the frame quality maybe increased depending on bandwidth availability (col. 2 lines 12-17).

Regarding Claims 33 and 48, Adams shows that the resource restriction comprises bandwidth restrictions (col. 5 lines 10-50, lines 64-67).

Regarding Claims 34 and 49, Adams in view of Day (Col. 6, lines 9-25) further shows that the resource restriction comprises a computing restriction.

Regarding Claim 35, Adams shows that the data sources comprise display commands, or instructions on how the data will be displayed (col. 1 lines 50-59, col. 2 lines 42-44; Col.. 4 lines 58-59). This 'application data' or 'auxiliary packets' are data that describe how the 'frame' of MPEG data is displayed. The data describing what frames are to be displayed or what bit rate to use are the display commands. The information tells the receiver how to create, or display, the image at the user site.

Regarding Claim 37, "providing an indication of the content with the data sources" reads VOD list with explicit link to each video stored (Day; Col. 4, lines 30-65+).

Regarding Claim 38, Adams shows that it is possible to analyze, based on the display commands, such as bit rate and application data to determine the content of the data, such as a slow moving scene (col. 2 lines 12-17).

Regarding Claim 39, Adams shows that applications data, generated by software, indicates information about the content of the data (col. 1 lines 50-59, col. 2 lines 42-44; Col. 4 lines 58-59).

Regarding Claim 43, Adams in view of Day further shows wherein the instantaneous resource restriction comprises an instantaneous computing resource restriction (Day; Col. 5, lines 63-Col. 6, lines 25).

Regarding claim 44, Adams in view of Day (Col. 4, lines 10-17; Col. 5, lines 65-Col. 6, lines 25) further shows wherein the differentially converting comprises converting each data source to a different frame rate compressed video stream.

Regarding Claims 45 and 47, Adams (col. 2 lines 12-17) in view of Day shows that the frame quality may be increased/decrease depending on bandwidth availability.

Regarding Claim 50, Adams shows using asynchronous compression and MPEG-2 encoding (col. 5 lines 10-27, synchronous transfer mode and variable bit rate as a result of MPEG-2). Furthermore, MPEG-2 type encoding inherently only sends data when a change has occurred in the image, as expressed in a P or B frame.

Regarding Claim 51, Adams (col. 5 lines 45-67, col. 6 lines 1-50, controlling the fullness of the encoding buffer B based on bandwidth availability) in view of Day (Col. 6, lines 20-31) further shows using a variety of data buffers, which queue and delay generation of compressed data to accommodate the instantaneous resource restriction.

Regarding claim 52, Adams in view of Day (Col. 4, lines 10-18; Col. 5, lines 30-52; Col. 5, lines 65-Col. 6, lines 2) further discloses wherein a same compression depth is achieved for each client receiving compressed video streams from the system.

Regarding claim 53, Adams in view of Day (Col. 4, lines 10-18; Col. 5, lines 30-52; Col. 5, lines 65-Col. 6, lines 2) further discloses wherein the content includes a hint corresponding to how the content should be compressed and multiplexed based upon a minimum bandwidth requirement needed by the client.

Regarding claim 54, Adams in view of Day (Col. 4, lines 10-18; Col. 5, lines 30-52; Col. 5, lines 65-Col. 6, lines 2) further discloses wherein the hint comprises a hint regarding a maximum quality reduction that can be applied to the content.



Regarding claim 55, Adams in view of Day (Col. 4, lines 10-18; Col. 5, lines 30-52; Col. 5, lines 65-Col. 6, lines 2) further discloses wherein the types of data to be displayed include parts of a display.

Regarding Claim 56, although icons and menus can be sent in the systems of Adams in view of Day, Adams in view of Day does not specifically disclose wherein the parts of the display include at least one of the icon and a menu bar.

Official Notice is taken that icons and/or menu bar to be part of the display is notoriously well known in the art. Therefore, it would have been obvious to modify the system of Adams in view of Day to have icons/menu bar to be part of the display so to provide to user a friendly GUI for navigating among items on the display.

2. Claim 57 rejected under 35 U.S.C. 103(a) as being unpatentable over Adams (US 6044396) in view of Day et al. (US5996015), and further in view of Lavallee (6,215,904).

Regarding Claim 57, Adams shows compressing and sending computer application and control data in addition to video data (col. 4 lines 50-65, Application data). Although text can be sent in the systems of Adams in view of Day, they fail to specifically state creating more compression for text data.

Lavallee shows creating different compression for various data, depending if it is image or text data (col. 3 lines 10-67, selecting an encoding scheme based on the content of an image, such as text or pictures). It would have been obvious to modify

the system of Adams in view of Day with the ability to compress text to a greater extent, as taught by Lavallee so that the most efficient data was sent to the user.

3. Claims 58-60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Adams (US 6044396) in view of Day et al. (US5996015), and further in view of Mussman et al. (US 6243388).

Regarding claims 58-60, Adams in view of Day, all describe digital data packet streaming systems that require some type of client computer address in order to send appropriate data (such as an IP address/'digital subscriber number'), but they fail to specifically state using an 'customer identifier'/' a STB digital subscriber number'.

Mussman clearly shows using a customer identifier to locate clients in a broadband system (col. 11, lines 1-10, col. 12 lines 15-37, customer units identified by subscriber number/device number). It would have been obvious to one of ordinary skill in the art at the time the invention was made, and is well known in the art, to modify Adams in view of Day with a client/device subscriber number so as to uniquely identify and communicate with a specific client/device.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai Tran whose telephone number is (571) 272-7305. The examiner can normally be reached on M-F.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher C. Grant can be reached on (571) 272-7294. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

HT:ht  
11/23/2006



**HAITRAN  
PRIMARY EXAMINER**